## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

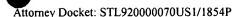
1. (Currently Amended) A method for allowing long term, update and edit control over an extended time period in a database system, the method comprising:

providing defining library control functions in a database system; and utilizing the library control functions via structured query language statements to ensure data integrity during accessing of complex data objects comprising opaque data types in the database system.

- 2. (Currently Amended) The method of claim 1 wherein providing defining library control functions further comprises providing a checkout function to lock at least one cell in a managed database table of the database system.
- 3. (Currently Amended) The method of claim 2 wherein providing defining library control functions further comprises creating a set of update and delete triggers in correspondence with the checkout function.
- 4. (Currently Amended) The method of claim 3 wherein providing defining library control functions further comprises creating a set of side control tables for each selected table that contains library controlled columns enabled for control under the library control functions.

- 5. (Currently Amended) The method of claim 4 wherein utilizing the library control functions further comprises utilizing the set of side control tables to designate a primary key, the primary key being based on a user an identity of a user accessing data and as well as a column name of the data being accessed by a user.
- 6. (Original) The method of claim 5 further comprising utilizing the primary key as an edit control mechanism for a checked-out cell until an update occurs by the user.
- 7. (Original) The method of claim 3 wherein utilizing the library control functions further comprises utilizing the library control functions to control access to a workflow document.
- 8. (Original) The method of claim 7 wherein the workflow document further comprises a decomposed XML document.
- 9. (Original) The method of claim 8 wherein the decomposed XML document further comprises an XML workflow document received via electronic mail.
- 10. (Original) The method of claim 9 wherein the set of update and delete triggers streamline performance of each workflow step from the decomposed workflow document.
- 11. (Currently Amended) A system for allowing long term, update and edit control over an extended time period in a database system, the system comprising:
  - at least one computer processing device; and





a database management system installed on the at least one computer processing device, the database management system supporting <u>definition of library control functions and</u> utilization of <u>the library control functions</u> via structured query language statements to ensure data integrity <u>during</u> accessing of <u>complex data objects comprising</u> opaque data types in the database system.

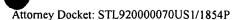
- 12. (Currently Amended) The system of claim 11 wherein the database management system further supports utilization of library control functions that include a checkout function to lock at least one cell in a managed database table of the database system.
- 13. (Original) The system of claim 12 wherein the database management system further supports creation of a set of update and delete triggers in correspondence with the checkout function.
- 14. (Currently Amended) The system of claim 13 wherein the database management system further supports creation of a set of side control tables for each selected table that contains library-eontrolled columns enabled for control under the library control functions.
- 15. (Currently Amended) The system of claim 14 wherein the database management system further supports utilizing the library control functions through utilizing the set of side control tables to designate a primary key <u>the primary key being</u> based on a user an identity of a user accessing data and as well as a column name of the data being accessed by a user.



- 16. (Original) The system of claim 15 wherein the database management system further supports utilizing the primary key as an edit control mechanism for a checked-out cell until an update occurs by the user.
- 17. (Original) The system of claim 13 wherein the database management system further supports utilizing the library control functions to control access to a workflow document.
- 18. (Original) The system of claim 17 wherein the workflow document further comprises a decomposed XML document.
- 19. (Original) The system of claim 18 wherein the decomposed XML document further comprises an XML workflow document received via electronic mail.
- 20. (Original) The system of claim 19 wherein the set of update and delete triggers streamline performance of each workflow step from the decomposed workflow document.
- 21. (Currently Amended) A computer readable medium containing program instructions for allowing long term, update and edit control over an extended time period in a database system, the program instructions comprising:

providing defining library control functions in a database system; and utilizing the library control functions via structured query language statements to ensure data integrity of opaque data types in the database system.

- 22. (Currently Amended) The computer readable medium of claim 21 wherein providing defining library control functions further comprises providing a checkout function to lock at least one cell in a managed database table of the database system and creating a set of update and delete triggers in correspondence with the checkout function.
- 23. (Currently Amended) The computer readable medium of claim 22 wherein providing defining library control functions further comprises creating a set of side control tables for each selected table that contains library-controlled columns enabled for control under the library control functions.
- 24. (Currently Amended) The computer readable medium of claim 23 wherein utilizing the library control functions further comprises utilizing the set of side control tables to designate a primary key, the primary key being based on a user an identity of a user accessing data and as well as a column name of the data being accessed by a user.
- 25. (Original) The computer readable medium of claim 24 further comprising utilizing the primary key as an edit control mechanism for a checked-out cell until an update occurs by the user.
- 26. (Original) The computer readable medium of claim 22 wherein utilizing the library control functions further comprises utilizing the library control functions to control access to a workflow document.



27. (Original) The computer readable medium of claim 26 wherein the workflow document further comprises a decomposed XML document.



28. (Original) The computer readable medium of claim 27 wherein the decomposed XML document further comprises an XML workflow document received via electronic mail.

29. (Original) The computer readable medium of Claim 28 wherein the set of update and delete triggers streamline performance of each workflow step from the decomposed workflow document.